

THE IBIS.

EIGHTH SERIES.

No. III. JULY 1901.

XXVIII.—*On the Ornithology of the Var and the adjacent Districts.* By J. H. GURNEY, F.Z.S.

THE Department of the Var, in Southern France, so much visited by our countrymen, is bounded on the north by the Basses Alpes, on the east by the Alpes Maritimes, and on the west by the ornithologically famous Bouches du Rhône. Of these four Departments (formerly known as Provence) the Var has the most southerly coast-line, which is 120 miles in length and for the most part rocky, with many headlands and several islands, as indicated on the accompanying map (p. 362). By way of its shores thousands of migratory birds probably make the land every spring, while other species, like *Grus communis*, pass over them on their way to England and Norway without halting, and a still greater number enter at the Delta of the Rhone. No doubt a vast majority of these travel by night, but Raptorial birds and some large forms besides are said to prefer the day.

April is the great month for the vernal migration, and it is just at that time, when Colonel Irby describes them in his 'Ornithology of the Straits of Gibraltar' as assembling in vast numbers on the coast of North Africa for the northern transit, that the small *Passeres* are to be seen arriving on the coast of France. Once there, they do not always remain, as might have been expected, and it frequently happened during my stay that an interesting bird was noticed and

booked in my N. H. Journal, which the next day was gone from the place after a brief halt of three or four hours only, while after a short time others of the same kind appeared, to fill its room. The authors of 'Les Richesses Ornithologiques du Midi de la France' knew this habit, when, speaking of the spring-migration, they said: "L'après-midi a souvent vu disparaître tout ce que les premières heures de la matinée nous avaient amené."

In 1900 the passage may be said to have been entirely

Fig. 31.



over by the 9th of May; not a bird was to be seen afterwards where there had been so many before, except a pair mated and settled for the summer at rare intervals. The *bonâ fide* travellers had passed on, and I remember that the same change from plenty to scarcity struck me forcibly in Algeria at just about the same date (Ibis, 1871, pp. 68, 289). Migration is very similar in the two countries, except that birds are more numerous in Algeria.

As regards migratory water-birds, there is one important feature in which the shores of Provence—that is east of the

mouth of the Rhone—are inferior to those of most countries. In the Mediterranean there is comparatively little tide, and consequently none of those tempting mud-flats exist for Waders to feed upon *en route* which are uncovered at low water in more northern estuaries. For migrants of this order, therefore, there are less inducements to stay.

The two writers who have paid most attention to migration in the Var and Alpes Maritimes are M. Pellicot, of Toulon, and M. Duval-Jouve, of Grasse. Both these gentlemen lay special stress on rain, as being the great factor in hastening migration, especially in autumn. “The first heavy rains” [in autumn], says Duval-Jouve, “seem to arouse the migratory impulse. . . . Sometimes when the early autumnal rains have fallen in sufficient quantity to thoroughly cool the earth and atmosphere, and when a light wind has blown from the north-west, the birds of passage have arrived in immense flocks, and the sportsmen have made great havoc among them; but this is not the case when the north-west winds have not been preceded by rain.” Pellicot, speaking of the migration of the Spotted Crake (*Porzana maruetta*), uses almost the same words in reference to rain and wind as Duval-Jouve, who perhaps was quoting from him:—“Quand il a plu vers la Saint-Michel [Sept. 29], et qu’à la pluie succèdent les vents d’ouest ou de nord-ouest, il y a des journées de très-grands passages de marouettes.” And in another place he says “ce sont les pluies qui déterminent d’abord le passage” of migratory birds in general, referring more particularly to the early autumn migration which commences in August; but he adds, “quand les vents qui favorisent le passage n’ont point été précédés par la pluie la migration s’opère encore sans doute, mais elle est plus restreinte que dans le premier cas.” So much rain would not be altogether favourable in England, where the direction and velocity of the wind would be considered a more important factor. It must, however, be borne in mind that the Var, and still more the Alpes Maritimes, are high lands, and in some districts exceedingly mountainous, as shown in Howard Saunders’s bathy-orographical map.

In most other respects the experience of the above-mentioned authors is merely what we would be naturally led to expect; but there is one singular observation of Pellicot's which is not very easy to understand, where he tells his readers that Starlings, Pigeons, and Thrushes differ from other birds in their autumn migration by following the coast instead of striking out to sea. Also Duval-Jouve says that when the autumnal rains are late, Pigeons, Starlings, and many other birds which habitually fly towards the west and against the wind, fly in an opposite direction. In these cases I should imagine strong winds to be the explanation of the unusual movement.

In the spring it appears that there is sometimes a great migratory journeying of birds from west to east along the coast of Provence. This was detected, on April 19, 1895, at Bordighera, probably with an easterly wind ('Zoologist,' xix. p. 309). In the autumn it is found that *Grus cinerea* and *Ciconia alba*, after coming south, habitually turn westwards, and fly towards Spain (*vide* L. Ternier, 1899). Again, many of the rarities which have been obtained in the South of France are distinctly of eastern origin, e.g. *Carpodacus erythrinus* and *Emberiza cæsia*, but it cannot be doubted that their presence is greatly due to wind, which blows them where they do not, of their own accord, attempt to go.

In 1900 the spring migrants, according to my note-book, arrived in the following order, and the dates differ little from what they would have been in England:—

<i>Cuculus canorus</i> (reported)	March 6	<i>Sterna cantiaca</i>	April 11
<i>Machetes pugnax</i>	" 9	<i>Cotile riparia</i>	" —
<i>Chelidon urbica</i>	" 12	<i>Daulius luscinia</i>	" 13
<i>Saxicola œnanthe</i>	" 18	<i>Cypselus apus</i>	" 15
<i>Crex porzana</i>	" 20	<i>Muscicapa atricapilla</i>	" 28
<i>Totanus ochropus</i>	" 21	<i>Ruticilla phœnicurus</i>	" —
<i>Iynx torquilla</i>	" 24	<i>Oriolus galbula</i>	" 30
<i>Upupa epops</i>	" 29	<i>Muscicapa grisola</i>	" —
<i>Hirundo rustica</i>	" 30	<i>Caprimulgus europæus</i>	May 2
<i>C. canorus</i> (certain)	April 1	<i>Turtur communis</i>	" —
<i>Scops giu</i>	" 5	<i>Lanius pomeranus</i>	" 8
<i>Hypolais polyglotta</i>	" 9	— <i>collurio</i>	" 12

It may be worth comparing a few of the above-mentioned dates of arrival with those noted in Algeria; Corsica (by Mr. Whitehead in 1883); and Norfolk (by the Rev. M. C. Bird).

	Algeria, 1870.	Corsica, 1883.	France, 1900.	England, 1900.
<i>Chelidon urbica</i>	Feb. 17	March 20	March 12	April —
<i>Hirundo rustica</i>	" 19	" 16	" 30	" 17
<i>Upupa epops</i>	March 13	" 24	" 29
<i>Anthus trivialis</i>	" 18	April 21	May 15
<i>Cotile riparia</i>	" 22	" 11	April 11	" 15
<i>Ruticilla phœnicurus</i>	" 27	March 24	" 28	" 21
<i>Daulias lusciniæ</i>	" 31	April 19	" 13	" 21
<i>Sylvia cinerea</i>	April 1	" 20	" 21
<i>Merops apiaster</i>	" 1	" 19	May 10
<i>Turtur communis</i>	" 11	" 16	" 2	May 4
<i>Muscicapa grisola</i>	" 24	" 17	April 30	" 21

On looking over these dates of arrival, and also those which I took down in Egypt in 1875, the principal thing which strikes me is the rapidity with which the birds, having once started, pursue their journey. The Turtle-Dove (*Turtur communis*), for instance, is in Northern Egypt on April 2nd, in Algeria on the 11th, in Corsica on the 16th, in the Var on May 2nd, in England on May 4th, and a little later in the Shetland Islands, which may be considered beyond its ordinary limit.

The average time which the spring passage of any particular species lasts is probably three weeks—that is to say, individuals keep on coming to the Var in succession for that period, provided the weather be normal; the first arrivals having passed on and reached their journey's end before the latest comers appear. A more favourable place for the study of migration than the North-west Mediterranean there could not be, and were there a Gätke on one of the rocky little islands off the coast of the South of France he would surely have much to tell us.

I crossed the Mediterranean twice in January and twice in the summer and saw nothing; but there is hardly any ornithologist who has been afloat at the periods of migration

who has not something to tell us of land-birds passing his ship or alighting upon it, and in some cases remaining on board a whole day—see the diary of William Thompson on board H.M.S. 'Beacon' (Annals of N. H., 1842); and articles by the late Lieut. Sperling (Ibis, 1864, p. 268), Lord Lilford (three cruises), and others. The three naturalists here mentioned enumerate 55 species of birds, such as *Circus cineraceus*, *Falco vespertinus*, *Scops giu*, *Lanius pomeranus*, *Sylvia subalpina*, and *Plegadis falcinellus*, seen on the Mediterranean, many of which were observed several times, and were there space I would willingly quote some of their experiences.

Perhaps, before proceeding further, a short description of this part of Provence, as it appears in April and May, may not be out of place. The Var is a Department with no great lakes or rivers, but there are forests, of which the Forêt des Maures, formerly inhabited by *Aquila navia*, is probably one of the most attractive. There are many valleys, and in them it must often be warm enough for migratory birds to halt, when the mountain-land is still too cold to provide them with insect-food. Even in the most sheltered places, however, the delicate *Hirundines* are completely nonplussed by any sudden drop in the thermometer, and after a single day's fasting have hardly strength enough to fly, especially in the case of *H. rustica*.

The slopes of the Esterel are clothed with pines of three kinds—*Pinus halepensis*, *P. maritima*, and *P. pinea* (the "pin parasol" or "umbrella pine")—and are the home of *Bubo ignavus* and a few Eagles, besides being the refuge of many foxes, marten-cats (five of which were brought into Grasse while we were there), and wild boars, for the last of which hunts are organized, while poison is laid about for the foxes. Further down, mingled with pines, are large woods of cork-trees, the skinned trunks of which present a very unsightly appearance; these are the resort of Jays and Woodpeckers. Interspersed with them are tracts of broken ground where the Red-legged Partridge breeds, and when these districts are clothed with *Cistus* of two kinds, *Erica*

arborea, and *Genista*, a congenial thicket is made for the Dartford Warbler, which worms its black body about amongst them, while the Magpie's chatter is seldom absent.

Buzzards breed on the tops of these Esterel Mountains, which at their highest reach 2000 feet, and perhaps a few Neophron Vultures still nest there occasionally. In 1900 a forest fire had recently taken place, and such conflagrations must be rather disastrous to bird-life, as they are sometimes very extensive. The fir-clad slopes then become a mass of charred and blackened stems, which are most unsightly, but perhaps they never have very many birds on them. The slopes are succeeded by more level ground, with small vineyards; and here we begin to meet with the Serin Finch—so essentially characteristic of the country that it has earned the name of “Serin de Provence,”—the Black-headed Warbler, and the large Fruit Dormouse, while where umbrageous trees of large size grow the Oriole may perchance be detected, like an orange in the foliage, yet more skilful in concealing its bright plumage than might be expected. It was not my luck to fall in with the brilliant Bee-eater. By the sides of streams the oleander grows in some profusion; tortoises are to be seen, as are the Green Sandpiper and the Grey Wagtail. The Var is too far west for the orange-tree, which fruits freely in the Alpes Maritimes, and in many districts the place of the picturesque grey olives is taken by groves of cork-trees, a habitation to which the Scops Owl and the Pied Flycatcher are rather partial.

The villa gardens run for the most part along the coast, with plenty of cactuses and mimosa-trees for the Willow and Icterine Warblers, while the English Blackcap is at home in the shady plane-tree, which is such a feature in French suburbs. On the fallow land the Crested Lark and its congeners are to be sought, with Pipits of various sorts, and perchance the Meadow-Bunting may be viewed balancing on a spray, while the Chaffinch, Greenfinch, and Goldfinch are universally found, the latter brilliant as a butterfly under the southern sun, and not persecuted by bird-catchers as it would be in England. This description is taken about the first

week of May, at which time a lepidopterist would probably find the warmest valleys teeming with butterflies. My son captured examples of 35 species.

And now to shortly enumerate what has been written on the ornithology of this part of France. It is to be hoped that the valuable list of local works by Mr. Howard Saunders and M. Clement on the ornithology of France (Zoologist, 1878, p. 95) will be republished for more general circulation with the necessary additions to bring it up to date. 'A List of the Migratory Birds of Provence,' by M. J. Duval-Jouve, professor of philosophy in the college of Grasse (Zoologist, 1845, p. 1113), comes first, and probably refers quite as much to the Var as to the three other Departments which formerly were included under the name of Provence. In 1853 a catalogue of birds by the late Dr. J. B. Jaubert appeared in the first part of the 'Prodrome d'Histoire naturelle du Département du Var,' for the loan of a copy of which I am indebted to Prof. Newton. Six years later the same author, in conjunction with Barthélemy-Lapommeraye, issued the 'Richesses Ornithologiques du Midi de la France,' in which Hyères, Draguignan, Fréjus, and other places in the Var are often mentioned, the book being a worthy successor of Polydore Roux's 'Ornithologie Provençale' (1825-9). A. Pellicot's 'Oiseaux Voyageurs sur les Côtes de la Provence' (1872) is a reprint of previously published articles, with additions, while Risso's 'Histoire Naturelle de Nice et des Alpes Maritimes' (1826) contains a list of 306 species. Mr. W. E. Clarke's valuable papers on the Camargue (Ibis, 1895 and 1898) have some bearing on the Var, and I am indebted to M. l'Abbé Joseran for a list of species, and to M. Cavaleadt and Mr. St. Quintin for other details. L.-A. Levat's 'Les Oiseaux de Provence' (1894) is also a useful alphabetical enumeration, but little has been published about the Basses Alpes and the Var of recent years, though the Baron de Paluel and Mr. Hanbury have printed a few notes about Nice, whence some years ago I received a small collection.

Jaubert gives about 310 species, to which *Regulus ignicapillus*, *R. cristatus*, *Ædemia nigra*, and *Pterocles alchata*

have to be added, making 314; but his paper is little more than a list, with very brief remarks in most cases: I saw it abroad, but believe that Prof. Newton is the only possessor of a copy in this country. It must be admitted that for an area little bigger than the county of Norfolk 314 is a very good total (the Norfolk list stands at only 307); but it is probably greater now, for Jaubert wrote nearly fifty years ago, and since then some of the scarce Buntings, such as *Emberiza aureola* and *E. caesia*, which have come to the Basses Alpes and the Bouches du Rhône, have most likely also visited the Var, while some of the rare Thrushes, of which there are French specimens in the Marseilles Museum, e.g. *Turdus varius*, *T. atrogularis*, and *T. obscurus*, may have occurred.

All these 314 species are without doubt migratory, in the sense that the bulk of the individuals have reached the South of France by crossing either the North Sea or the Mediterranean or a very great extent of land, except *Bubo ignavus*, *Cinclus aquaticus*, the Game-birds, and perhaps *Passer domesticus*, *Gecinus viridis*, and *Tichodroma muraria*; but I am not certain about the last three, as the evidence is conflicting.

It is a very common remark among the English in the Riviera that there are no birds, and a discussion on this subject was recently started in the 'Field' newspaper (April 7th, 1900 *et seqq.*) *. I think, however, after the preceding description, the reader will not quite acquiesce in that opinion. It seemed to me, being on the spot, that the truth really lay in this, that wild birds were not in evidence, because the number of individuals was much less than we are accustomed to see in the lanes of England, where all sorts find food in abundance; but in fact a good many species are there—at any rate during the periods of the vernal and autumnal migration—for those with good eyes and leisure to search, and especially is this the case in the Western Riviera and the districts nearer to the Rhone. England is a favoured country, and the truth is that there are very many parts of Europe which are birdless indeed compared with the

* See also 'Ibis,' 1899, p. 442.

land in which we live, and that forests and mountain-ranges never afford food for more than a limited number of species.

A good modern book on the ornithology of the South of France, with much more local information than is contained in the 'Richesses Ornithologiques,' would be most acceptable, while a handbook founded on it, in English, for the use of visitors, could not fail to be very useful, and would perhaps dispel the general idea that there are no birds in France. Since the great war with Germany, in 1870-1, Natural History has been somewhat at a standstill, the French people having too many other things to think about; and the literature of ornithology has consequently fallen behind that of England and Germany. Yet the flowers, the butterflies, and the shells of the South of France have received their due share of attention, though the birds have been neglected.

SONG-THRUSH. *Turdus musicus.*

The northward passage of *T. musicus* takes place in March, and in spite of long-continued persecution the bird is still sufficiently distributed to make its sudden disappearance pretty noticeable, while it will be remembered that it is in this month that the principal accession to the numbers is to be observed in England.

The "chasse au poste" or "poste à feu," which appears to be quite an institution, takes place in September, and an amazing account of it is given by M. Pellicot. In the first place it is necessary that the decoy birds be put out some time before daybreak, and that the gunner be at his post and concealed betimes, as *T. musicus* is on the wing very early, and will often flutter round the cages containing the decoys even before it is light. Then the gunner, from his place of concealment, picks off the unsuspecting migrants as they settle on the "poste," which is generally a bough, without leaves, elevated in an open place.

BLACKBIRD. *Turdus merula.*

The "Merle noir" is here appropriately called an "Avouca," in allusion to its resemblance to a black-gowned lawyer. A large Thrush, such as *T. viscivorus* (which we

found breeding) or *T. pilaris*, is called a "Chastria"; the smaller kinds, that is to say, *T. musicus* and *T. iliacus*, are "Toudres," or, according to another writer, "Tourdres," but I had not an opportunity of hearing these names pronounced. Some Blackbirds in the Grasse market seemed very grey, and there are several curious variations in the Marseilles Museum, while P. Roux describes a pied race which seems to have been perpetuated for some years.

REDWING. *Turdus iliacus*.

The origin of many of our bird-names may be traced to the French language; for example, in Britain a Thrush is called by country people a "Mavish," but, as Mr. Howard Saunders remarks, "Mauvis" in French means a Redwing, and it is so understood in Provence, where the bird is regularly met with in winter. It is a name, too, which has a southern signification, for Mr. Wharton understands it to mean the bird which destroys the vine, *i. e.* eats the grapes.

RING-OUZEL. *Turdus torquatus*.

It is not known how far south *T. torquatus* goes in winter. It was met with, I believe, by Lord Lilford in the Var, and I shot it in Algeria in March, but its distribution is complicated by its affinity to *T. alpestris*, which species has been too recently separated to say whether it is found in the Var at all or only on migration. Pellicot, a very accurate observer, distinguishes between the "Merle à plastron" and the "Merle à plastron blanc" or "Grand Merle de Montagne."

BLUE THRUSH. *Monticola cyanus*. "Petrocinclé bleu."

Mr. W. H. St. Quintin saw considerable numbers of this species at Grasse, and once observed *M. saxatilis* ('The Field,' May 12th, 1900), but the only Blue Thrush seen by me was in a Cannes shop. Jaubert and Barthélemy-Lapommeraye consider the "Merle azure" of Crespon to be a hybrid between the two species, an opinion shared by Suchetet. In the Abbé Joseran's list *M. saxatilis* is included, and not *M. cyanus*, but Duval-Jouve considered the latter to be stationary. Canon Tristram met with *M. cyanus* at Cassis.

COMMON WHEATEAR. *Saxicola ananthe*.

A considerable immigration to Provence took place on April 24th, surely of a delayed party, or of those which had come from very far south. Pellicot says that one man trapped 624 "culs-blancs" in two days, which recalls the wholesale captures on the Sussex downs. The bulk arrive in England much sooner.

BLACK WHEATEAR. *Saxicola leucura*.

S. leucura loves rocky places, and is more likely to be met with at Nice than in the Var. I received two from Piedmont. *S. aurita* is stated by Jaubert to be not uncommon, and Mr. Clarke met with *S. stapazina* in the next Department.

STONECHAT. *Pratincola rubicola*.

One had perhaps wintered where it was seen on March 12th, as I know from a previous visit that Stonechats are sometimes not uncommon even in December, though the Whinchat (*P. rubetra*) is only a summer visitant. All the "Traquets," however (6 in number), according to Jaubert, nest in the Department in small numbers, but individuals of *P. rubicola* which breed there would not be the same as are seen in winter.

BLUETHROAT. *Cyanecula wolffi*.

A pair of Blue-throated Warblers seen at Bocca on the coast by Mr. St. Quintin ('The Field,' *l. c.*) were presumably *C. wolffi*, a well-marked form, of which the distribution is not very clear.

REDSTART. *Ruticilla phœnicurus*.

Apparently not a common bird. Personally I never encountered *R. tithys*, though Canon Tristram and others have met with it.

RUBY-THROATED WARBLER. *Calliope kamtschatkensis*.

This straggler from the East has been taken twice in the Department, once in August 1829 and once in April 1835, both specimens being adult males; and at the time of writing, the author of 'The Birds of Europe' was not cognisant of any other examples having occurred west of Russia. It is, however, said to have recently found its way to England.

BLACK-HEADED WARBLER. *Sylvia melanocephala*.

Called sedentary by Jaubert, but I did not meet with it until April 7th, although then a good many were paired; however, in 1877, a very mild winter, the birds were at Cannes in January. I did not notice that they stained their faces with the pollen of plants, as at Gibraltar, where it was rather difficult to find one not more or less yellow from contact with the pepper-tree, aloe, mimosa, &c., a fact which probably gave rise to the synonym *Sylvia ochrogenion* Linder Meyer. Here they do not seem to act thus, and the plants they are likely to meet with would be less tropical.

NIGHTINGALE. *Daulias luscinia*.

Daulias luscinia abounds at Valescure, and literally sings down every other bird. If the statement be true that it does not migrate in company, it must take some time for all to come over, but I do not believe this fiction, because within the space of a few days in April the previously silent woods ring with the song, indicating a rush. Of *Sylvia atricapilla* the migrating range is far less, and many individuals winter in the Riviera, which *D. luscinia* never does. In December 1876 there were a good many Lesser Whitethroats (*Sylvia curruca*) on the island of St. Marguerite; it certainly was very early, but it was an open winter, and I do not think I was mistaken as to the species, though there may have been a few *S. cinerea* or *S. conspicillata* as well.

DARTFORD WARBLER. *Melizophilus undatus*. "Fauvette pitchoux."

Among the tall Mediterranean heather, cistus, and genista, which form the knee-deep jungle of the Estrelles, the Dartford Warblers find a secure home. In April their black little bodies and long tails—spread perhaps for an instant—as they worm themselves in and out of all the tangle, are to be seen anywhere at Valescure. Always in pairs, the proud male will sometimes rise to the top of a bush or tall *Erica*, and with swelling throat serenade his sombre partner, "pit-it-chou, pit-it-chou, cha-cha," whence the French name; and to watch *M. undatus* thus displaying himself is at all times

very delightful. These birds do not shun houses, and may be seen within a few yards of the Grand Hotel itself; but I was rather surprised to see a pair fly across the river Argente, never having associated *M. undatus* with reeds and rushes, and on the other hand again to meet with them on the lofty sides of Mount Vinaigre, though the latter is more like their Algerian habitation. A great many were clearly migrants, but my son found one nest, which however was empty. A good many small birds' eggs are possibly destroyed by the "Loir," a large fruit-eating dormouse which is common, but in this case the rain had probably made the bird desert the nest. This Warbler can dispose of a larger insect than many people would give it credit for, but in seeking nourishment it seems at times to denude the base of the lower mandible of feathers, as I have noticed in England, where perhaps food food is scarcer than in its native France.

I follow the B. O. U. List in designating this bird *Melizophilus undatus*, but the authors of 'Les Richesses Ornithologiques' call it *Pyrophthalma provincialis*. This generic term was established long ago for *Sylvia melanocephala* and *S. sarda*, but if *Melizophilus* be adhered to, it can be restricted to *M. undatus* and *Sylvia deserticola* Tristr., which is very like *M. undatus*. M. le Baron de Palluel thinks that the bird of Provence is a larger and brighter race than that of the north of France, and proposes for the latter the name *Melizophilus armoricus*.

FIRE-CREST. *Regulus ignicapillus*.

R. ignicapillus and *R. cristatus* are, no doubt accidentally, omitted from Jaubert's list. Neither are they in Duval-Jouve's list, but to make up for this *R. modestus* (*Phylloscopus superciliosus*?) is introduced, probably by a mistake, yet the Yellow-browed Warbler might occur as an accidental straggler.

GRASSHOPPER WARBLER. *Locustella naevia*.

Once or twice we thought that we caught the trilling song of *L. naevia*, nor is this unlikely, as Duval-Jouve says that its arrival continues during the whole spring. The

earliest of all the birds of passage to appear in numbers is *Phylloscopus trochilus*, accompanied possibly by *P. rufus* and *P. bonelli*. *Hypolais polyglotta* may be common, but was only twice identified. It is very difficult to make out the small Warblers without shooting them.

REED-WARBLER. *Acrocephalus streperus*.

Jaubert says of *A. streperus*: "De passage, quelques individus nichent dans nos marais"; but it is not confined to marshes, for even the little stream which passes through St. Raphael is not too public for this "Rousserolle," in spite of the houses on either side. It is curious, as remarked by Howard Saunders, that *Aëdon galactodes* should not have occurred in France, but the allied *A. familiaris*, which is less rufous, has been taken three times at Nice (Giglioli, Ibis, 1881, p. 199), where Lord Lilford also found *Acrocephalus aquaticus* very common, and the latter should probably be substituted in Jaubert's list for *A. melanarrogon*. At Nice also MM. Gal, the local taxidermists, are stated to have obtained *Locustella fluviatilis*, *Curruca nisoria*, and *Daulias philomela* (see Ornis, 1899, p. 42).

ALPINE ACCENTOR. *Accentor collaris*. "Accenteur pegot."

We saw *A. modularis*, but it was only on a previous visit that a single specimen of *A. collaris* was met with. Duval-Jouve says that *A. collaris* never crosses the sea, as *A. modularis* does, and Pellicot says that he has seen the latter at sea. The Alpine Accentor is a mountain bird not likely to be met with in the cultivated valleys; the masonry of a fort would be more congenial to it, and in such a situation I have watched it elsewhere.

DIPPER. *Cinclus aquaticus*.

Only three or four Water-Ouzels (*Merle d'eau* or *Cincle plongeur*) were seen, rejoicing in the mountain-torrent of the Loup, a stream on which they probably remain all the year, only quitting it when frozen out. Prof. Giglioli says that they are sedentary in Italy.

CRESTED TITMOUSE. *Parus cristatus*. "Mésange huppée."

One in Valescure pinewoods (*Pinus halepensis* and *P. maritima*), April 21st, flitting quite alone from fir to fir, and at times dexterously clinging with its feet to the needles, sometimes back downwards. How seldom in England could one see a Titmouse without companions of any kind, as it is one of the most sociable of birds, and this is especially the case with *Parus cristatus* (cf. Zool. 1890, p. 212). Miss Broadwood also observed it at Valescure, but does not say whether it was a single specimen that she saw, or a party. Risso classes it as one of the six most productive species, in proportion to its numbers, in this part of France, but it does not lay so many eggs as *P. caudatus*.

BLUE TIT. *Parus ceruleus*.

Not nearly so common as *P. major*, which is very generally distributed, and is also the most abundant in the Departments farther west. Our gardener described what he considered a very marvellous nest, which may have been a Penduline Tit's, a species which Duval-Jouve says is met with on the banks of the Var; it was woven of wool, with a hole at the bottom and one at the top. Other Tits included by Jaubert are *Parus ater*, *P. palustris*, *P. caudatus*, and *P. biarmicus*, which last Mr. W. E. Clarke also met with. *P. lugubris* was taken at Nice in February 1878 (Prof. Giglioli), thus coming very near the Var; and I have had *P. borealis*, the northern Marsh Titmouse, from Piedmont.

WREN. *Troglodytes parvulus*.

The Wren and the Robin are winter visitants, but the latter is much the commonest, though naturally less familiar and tame than in England. Prof. Newton mentions an old custom at La Ciotat of hunting the Wren with swords and pistols, and when killed the victim is slung to a pole borne as if it were a heavy load on the shoulders of two men who parade the village, and afterwards weigh the bird in a pair of scales. It would be interesting to know if the old custom still goes on at this small town by the sea, especially as it is so similar to the persecution of *T. parvulus* in Ireland. La Ciotat is

not far from Valescure, but I had not heard of this quaint ceremony when I was in the Var.

WALL-CREEPER. *Tichodroma muraria*.

P. ROUX, Orn. Prov. p. 366 ; Richesses Orn. p. 299.

How cleverly does the "Echelette" climb the rocks, probably making a lateral use of the hind toe. The impetus necessary for each jump is given, Mr. Moggridge thinks, by shortening in some way the tendon of that toe, thus naturally causing it to approach the three anterior, and these are the instruments of attachment (see Ibis, 1863, p. 161). The same jumping power would seem to be possessed by Woodpeckers*. The squat body of the *Tichodroma* reminds one of a Nuthatch.

It is, in fact, a Rock-Nuthatch with the bill of a Creeper, the more feeble flight not being sustained and having little power. One would not deem *Tichodroma* capable of any great migrations; yet its very feebleness would make it all the more at the mercy of the wind, and this accounts for its having been blown to England three times and to Alderney once (*Canon Tristram*). It is of periodic occurrence in Sarthe (*Gentil*), and has been often obtained in Indre (*Martin*); while Gadeau de Kerville gives occurrences in Normandy, three of them within seventy miles of Beachy Head. The limits of its regular migrations, however, show a very contracted range—lat. 31° to lat. 48° would more than comprise them. But one species of *Tichodroma* is recognised in 'The Catalogue of Birds' (viii. p. 333), and it certainly cannot be very common in Provence, as we only met with it in the Gorge du Loup; but Lord Lilford gives Ollioule, near Toulon, as another locality for it, and Canon Tristram met with it at Cassis.

* My father remarked on a pair of *Picus major*, confined in a large wire cage with a horizontal top, which came under his observation, that they frequently traversed the top of the cage with their backs downwards, and in doing so they constantly hopped, back downwards, leaving go of the wires with both feet at once, and regaining their hold by some muscular action without the aid of their wings.

TREE-CREEPER. *Certhia familiaris*.

The authors of 'Les Richesses Ornithologiques' distinguish two Creepers, viz. *C. familiaris* and *C. costæ*, the latter a resident in the mountains and more highly coloured. I presume that it was the former which I met with, as being near the sea with other migrants I thought that it might have just come over. *C. costæ* is perhaps identical with the Creeper of Corsica (Ibis, 1885, p. 31); but, according to Mr. Hartert (Nov. Zool. iv. p. 139), this again is distinct from *C. brachydactyla*, the form found at Lyons and common all over Italy (Giglioli, Ibis, 1881, p. 194). Mr. Hartert's latest views are given in Nov. Zool. vii. p. 525.

GREY WAGTAIL. *Motacilla melanope*.

It is rather surprising to find the "Bergeronnette jaune" so common in Provence, and also on the west coast of France, and that not merely as a winter visitant, for a few stay to breed on the Mediterranean, and I think that a pair nested by the little St. Raphael stream. Authors have not realized how abundant *M. melanope* is in the South of France. Mr. Howard Saunders found it swarming in the Pyrenees (Ibis, 1897, p. 80).

MEADOW-PIPIT. *Anthus pratensis*.

A. pratensis is to be seen in small numbers—also *A. trivialis* as a spring migrant,—while an unidentified Pipit on the Napoleon plateau may have been *A. campestris*. The other Pipits mentioned by Jaubert are *A. richardi* (rare), *A. cervinus* (very rare), and *A. aquaticus* (rather rare), none of which came within the range of my binoculars, though I have seen *A. spipoletta* (= *aquaticus*) in Southern Piedmont.

GOLDEN ORIOLE. *Oriolus galbula*.

French *Loriot*, from Lat. *aureolus* = golden. Local name, also in allusion to the colour, *Dorin*. It is the wont of these gorgeous birds, which appear to be common in France up to Paris, and were already paired on April 30th, to frequent large leafy trees, where the yellow cocks look like oranges, but are less conspicuous than one might expect, and more quiescent than the less obtrusive hens. We have it on the

best French authority that "leur chair est d'un goût recherché," which is no doubt the only interest the peasant farmer would take in them, except that their unfortunate partiality for figs is an additional reason in his eyes for destroying them. One which I skinned in Algeria contained a thick wad of caterpillar's hair, a proof that this individual at least had done good*.

LESSER GREY SHRIKE. *Lanius minor*.

Mr. Clarke found this bird excessively common during May and June on the Rhone, and it is also found in the Var, as is more rarely *L. meridionalis* (Jaubert); but I had not the good luck to meet with any Grey Shrikes, which was singular, as *L. excubitor* is not uncommon in some parts of France.

WOODCHAT. *Lanius pomeranus*. "Pie-grièche rousse."

L. pomeranus and *L. collurio* appear to be the last of the spring migrants, and very beautiful are the freshly-moulted males, so different to those of *Saxicola œnanthe* and *Muscicapa atricapilla*, which come earlier and are often still in the winter plumage. *L. pomeranus* sits like a sentinel on the cork-trees, and is less demonstrative than *L. excubitor*, whose tail does not know how to keep still! All the Shrikes, according to Jaubert and Regnier, are locally known as "Darnagas," a name which Roux says has been wrongly given to them by country people on account of their supposed stupidity. *L. pomeranus*, however, is rather a stupid bird.

PIED FLYCATCHER. *Muscicapa atricapilla*. "Gobemouche noir."

A late spring migrant, as in Algeria and in other parts of Europe, but probably always commoner in Provence than *M. grisola* (see Mr. Clarke's remarks, *Ibis*, 1898, p. 475), though

* In 'Ornis' for 1899, p. 130, will be found a detailed list of the Oriole's food in France in every month of the year, from which it appears that it does a certain amount of harm; and at p. 57 are added the dates of the arrival in spring, extending over thirty-eight consecutive years, giving an average of April 21st for the middle of France, and probably a few days earlier for the south.

the range of both is the same. *M. albicollis* is noted by Jaubert, but as very rare, and *M. parva* has been once killed in September, on the peninsula of Brusq (Ornis, 1899, p. 42).

ROCK-SWALLOW. *Cotile rupestris*.

Hirundo rustica, *Cotile riparia*, and *Chelidon urbica* are all common, but not *C. rupestris*, which was first seen on March 22nd near the coast; it had probably just arrived from Algeria, and was evidently on the move, for in a quarter of an hour the birds had passed on. Next they were observed in considerable numbers playing over the foaming Loup, and again in May a pair or two occurred on Mont Vinaigre.

RED-RUMPED SWALLOW. *Hirundo rufula*.

Mr. St. Quintin was on one occasion so fortunate as to see at the Gorge du Loup about a dozen examples of *H. rufula*, a species easy to be recognised by its red back and collar, and figured in the 'Richesses Ornithologiques.'

It is also well figured by Sharpe and Wyatt, who give a map showing its distribution.

SERIN FINCH. *Serinus hortulanus*.

The "Gros-bec cini," or Serin, is common, and no sooner are the male and female paired than they become assiduous in their mutual attentions, following each other from tree to tree until the nest is made and the eggs are laid, when the cock perpetually serenades his partner, beginning at early daybreak in a low clear continuous strain. A pair had a nest in the next garden at the end of a pine-branch; it was lined with feathers, and was so small that its outside diameter was only seven inches. In this instance the exterior of the fabric was made of a little grey plant which the French gardener said was an "immortelle." Another nest was on the top-most leader of a slim Aleppo pine, and the tail of the hen could be seen from below projecting over the edge. This was on May 10th, and as she sat closely she was probably hatching, but the pine was so slender that I was afraid of climbing up it. A French writer, René Paquet, under the *nom de plume* of Quépat, has published a monograph of the Serin, and another of the Goldfinch, which contain a good

deal of valuable information ; the former is probably a bird which is increasing.

CHAFFINCH. *Fringilla caelebs*.

F. caelebs, *Carduelis elegans*, and *Ligurinus chloris* are all resident, and the first two very common, many of them being perhaps the same individuals which at another time of year enliven our own groves at home. Clarke only saw *F. caelebs* once.

LINNET. *Linota cannabina*.

L. cannabina was less abundant, and was not seen associating with *Serinus hortulanus* as in some countries.

SISKIN. *Carduelis spinus*.

C. spinus was only seen in cages ; *Pyrrhula europæa* and *Coccothraustes vulgaris* I give on the authority of English friends who know them. Jaubert's "Bouvrenil incertain" was probably a young *Pyrrhula erythrina*, and his "Bouvrenil ponceau" perhaps an erythrism of *P. europæa*.

TREE-SPARROW. *Passer montanus*.

No doubt this species is highly migratory, but why Jaubert should think *P. domesticus* to be so is not clear ; here, as everywhere else, it is essentially a parasite on man. I tried very hard to detect *P. italiae*, the presence of which has been noted by Jaubert and l'Abbé Joseran, but doubted by Mr. Dresser. If a census of the birds of the Var could be taken, the Sparrow would probably come out at the head of the poll, as it unquestionably would do in England, being, moreover, the most destructive species in every grain-producing Department of France.

CROSSBILL. *Loxia curvirostra*.

Jaubert says the "Bee-touar" or "Pesso-pigno" (provincial names) is occasionally very abundant, as I learn was the case a few years ago at St. Tropez, when the visitors were very unwelcome, for they attacked the almond crop and did no little harm. Generally they are rare, but Lord Lilford met with a few near Toulon in 1873. Various years in which Crossbills were numerous in the South of France—

especially 1836-39 (inclusive)—are mentioned by authors, and everywhere they seem to bear the same gipsy character.

PINE-GROSBEAK. *Pyrrhula enucleator*.

P. enucleator is said to have appeared in numbers at Fréjus in the winter of 1836; but it has possibly been confounded with *Loxia curvirostra*, a mistake which has often been made in England. On the other hand, Mr. Howard Saunders reports a genuine *P. enucleator* in the Marseilles Museum, locally killed ('The Field,' June 26th 1880), and it is noted, though with a mark of doubt, in the 'Richesses Ornithologiques' and by Polydore Roux. It has also been authenticated as far south as the Italian Alps by Prof. Giglioli and Prof. Oddi, and there is no particular reason why it should not sometimes occur in France.

CORN-BUNTING. *Emberiza miliaria*. "Bruant proyer."

A single *E. miliaria*, a flock of five, and again three on May 10th were all that I observed, so I am rather surprised at Mr. Clarke's finding the bird abundant in the Bouches du Rhône. *E. citrinella* was still less common; and of the handsome Meadow-Bunting, *E. cia*, I saw only one fine cock on March 23rd, balancing himself on a bush with no companions. The other Buntings mentioned by Jaubert are *E. melanocephala* (very rare), *E. cirrus* (regular migrant), *E. hortulana* (regular migrant), *E. schæniclus* (autumn migrant), *E. nivalis*, &c. *E. nivalis* is not so rare in the south of Europe as has been assumed; when at Avignon on a previous visit I was told that one had been lately killed.

MARSH-BUNTING. *Emberiza intermedia*.

Jaubert states that *E. intermedia* is very common during the winter, and leaves in March, but that a few nest near Hyères; later authors, however, unite this race with *E. schæniclus*, while keeping *E. pyrrhuloides* distinct. The two latter are found in the Var, but *E. pyrrhuloides* is very rare; and the distinctness of all three of them forms the subject of an article by Dr. Jaubert in 'Revue Zool.' 1855, p. 225, while later authorities have discussed it on the strength of more material and probably with greater accuracy.

STARLING. *Sturnus vulgaris*. "Etourneau."

Said to be very abundant, but the only examples my son and I saw were seven or eight in a bird-cage shop, which, from having been a long time without turf to wear their beaks down, had them elongated in a very unnatural way.

BLACK STARLING. *Sturnus unicolor*.

Has occurred once at Draguignan in May ('Richesses Ornithologiques,' p. 108) and at Marseilles in January 1879, but there are still some persons who question its specific distinctness from *S. vulgaris*.

ROSE PASTOR. *Pastor roseus*.

Jaubert tells us that young birds are to be looked for in June and July, and that there was a great migration to the South of France of the adults in June 1837. I had a fair specimen from Nice some years ago.

MAGPIE. *Pica rustica*. "Pie ordinaire."

In some parts of the Riviera *P. rustica* is almost unknown, but assuredly there are no lack of these birds at Valescure. Crespon considers that they are not migratory, in which he does not agree with Duval-Jouve; but I found one lying dead on the shore, which was suggestive. They nest chiefly in *Pinus maritima* and *P. pinea*, laying six or seven eggs in May; yet on April 30th there was a "flyer" with a short tail, though it may have been an old bird moulting. For some unknown reason they arch their nests over, which seems an unnecessary protection; and, judging from several in my garden, I am quite of Vieillot's opinion that they make more nests than they mean to use, though the Owls are glad of them. The immunity from persecution of the "Agasso," as this long-lived thief is here called, and its consequent abundance in so many parts of France, is solely due to its being unfit to eat, which is what the local gunner thinks about.

This species is very destructive to the peasants' vines, as well as to melons, peas, and maize, also to young poultry, and there are stories of its audacity in taking young birds hung out in a cage. To this list of viands are to be added walnuts, almonds, and apples; but perhaps it makes some amends

by eating the earthworms, which are here as large as little snakes. The Magpie is the characteristic bird of France, and the only one which the average Englishman remarks as he speeds through the country.

JAY. *Garrulus glandarius*.

The crafty "Geai"—named, as it seems, after its own *gay* colours—is just as sly in France as it is in England; but it is easy to trap them, I believe, and a Jay pegged down with its feet in the air will hold any other bird that comes within its reach, according to Pellicot. Risso notes that *G. glandarius* sometimes appears in considerable bands, and in another place he says: "*G. glandarius* and *Sturnus vulgaris* have been sometimes seen during whole days passing at intervals in flocks" (H. N. de Nice et des Alpes Marit.).

NUTCRACKER. *Nucifraga caryocatactes*.

Included in Jaubert's list, but no occurrences specified, a fact which in several other instances detracts much from the value of his catalogue. Specimens were probably obtained in 1844, when many visited the South of France. In the same year one was shot in Norfolk and one in Sussex, showing the wide extent of the movement.

CARRION-CROW. *Corvus corone*.

"La Corneille noire" is stated to be migratory, but, according to Polydore Roux, does not cross the sea, by the edge of which was the only place where we saw it.

HOODED CROW. *Corvus cornix*.

I have had *C. cornix* from Nice, but it is said to be much less common than *C. corone*, while *C. frugilegus* is only found inland. "Chavo" or "Graio" is a provincial name for all of them (Pellicot), but not for the Raven. I have seen *C. cornix* in Italy as late as June 23rd.

SKYLARK. *Alauda arvensis*.

Common up to the end of March; indeed there were quite 150 in Grasse market one day during that month. On May 10th, long after the bulk of them had departed north, one on the golf ground was sitting on a nest which I should

have hardly recognised in England as a Lark's, it being constructed so as to completely arch over the sitting bird, and affording an admirable protection for her. She was unlike the Larks at Grasse, being lighter and of a mealy tint, and was probably of the subspecies *A. cantarella*.

CRESTED LARK. *Alauda cristata*.

The "Alouette cochevis" is called "sedentary," but evidently receives accessions; it cannot be very migratory in the north of France or it would not stop short within sight of the shores of England.

A ploughed field, especially if the harrow has not long since been over it, seems a very favourite resort; and there the cock and hen feed, and are very constant partners to one another, as may be noticed in the Pas de Calais. I never saw them come into villages, or perch on houses, or pant from the heat, or associate with Finches. Neither Mr. Wharton nor Mr. Whitehead include this species as a bird of Corsica, which seems very singular; but this is paralleled by its abundance on the south, and absence on the north, side of the Straits of Dover. Pellicot and De Palluel speak of a larger and darker race which the country people distinguish as the "Coquillade."

SHORT-TOED LARK. *Alauda brachydactyla*.

Two examples of *A. brachydactyla* were observed near Fréjus on April 18th and 24th, but I do not think that we saw *A. calandra* except in a cage. Two Larks which rose out of the cistus on May 10th were thought to be *A. arborea*, as certainly were two seen at a shop in Cannes on a former visit. A dark form of the Short-toed Lark has been recently distinguished in Provence by the Baron de Palluel.

ALPINE SWIFT. *Cypselus melba*. "Martinet à ventre blanc."

Two seen by Mr. St. Quintin, and another by Miss Broadwood at Bagnol—probably not uncommon. *C. apus* is very numerous, and, as at Algiers, delays its migration a while by the coast; both species are known by the appropriate name of "Coupou-ven" (Jaubert). A few individuals of *C. apus* may breed in St. Raphael Church.

NIGHTJAR. *Caprimulgus europæus*. "Tête-chèvre" or "Crapaud volant."

Not common (Pellicot); one seen by Lord Amherst on May 2nd. *C. ruficollis* has occurred (Jaubert and Alfred Cavaleadt).

WRYNECK. *Iynx torquilla*. "Toreol."

The noisy *que-que-que* was first heard under our windows on March 24th, and a few specimens occurred afterwards, but they soon passed on, and are seldom met with in summer (Jaubert).

GREEN WOODPECKER. *Gecinus viridis*.

Often heard and seen on the wooded hills until about the 1st of May, when its cry quite ceases, only to be brought on again in the same month by a heavy rain. I do not know whether the inhabitants associate the cry of the "Pic vert" with a downpour, but it is stated by local authors to be very susceptible to frost, which, as in England, seals up its means of existence. The authors of 'Les Richesses Ornithologiques' speak of a form having the upper parts yellowish, and in England I have met with a similar variety*. *Picus major* was not seen alive. *P. martius* has been found at Lachen (Jaubert).

KINGFISHER. *Alcedo ispida*.

On the Argente, and no doubt on other streams and rivers, every one knows the "Martin-pêcheur," but I have not found any book which explains why it should be dedicated to St. Martin more than to any other saint, or why *Circus cyaneus* should have the same honour.

BEE-EATER. *Merops apiaster*. "Guêpier."

The Bee-eater is a late spring migrant, believed to nest in one locality; four were seen by an English visitor at Bouhourie on May 11th, and two stuffed specimens are in a house at Valescure. Apart from the birds' beauty, their habit of calling as they fly would attract the attention of the most unobservant, and accordingly, though scarce, they are generally known.

* This bird, which I examined in the flesh, had a beautiful bronze tinge on the upperside of the wings, quite resplendent when it was held sideways to the light.

ROLLER. *Coracias garrulus*.

Jaubert and M. Cavaleadt both mention *C. garrulus*, of which there is also a fair example in the Cannes Museum, and Mr. Clarke saw one in the Bouches du Rhône. It is perhaps not generally known that these birds include small frogs and locusts in their bill of fare, while on one occasion I met with four very large beetles in the stomach. They would probably be the last of the irregular spring migrants.

HOOPOE. *Upupa epops*.

True to its appropriate Gibraltar name of "March Cock," *La Huppe* was first seen by my son on the 29th of that month. Crespon, so familiar with all his native birds, thought it to be the cock only which gave utterance to the resonant *pou, pou, pou*,—sounds to be heard a very long way off in a still wood; but probably the female (as is the case with *Cuculus canorus*) has a cry of her own, less loud and noticeable. To some ears this "pou, pou" is a note even sweeter than the Cuckoo's, which indeed it may well be! *U. epops* has a very small tongue compared with most birds; this may have something to do with its cry, which, when heard for the first time, is certainly very singular; and it is said to have a dilatible œsophagus, which may further assist. It is very fond of worms. The Arabs call it *Hud Hud*, not a bad rendering of the call, but I never heard that the French ascribe to it the same medicinal virtues which Mahomedans are said to do.

Hoopoes are not common at Valesecure, but a pair were beginning to nest in some farm premises, probably under the eaves, where they had bred once before. The result we left too early to know, which, for the sake of my nose, was not to be regretted. At the mouth of the Rhone Mr. Clarke found them surprisingly abundant, which makes it the more curious that they are not commoner in the Var, where the French proverb "sale comme une huppe," in allusion to the nest, can certainly not have originated.

CUCKOO. *Cuculus canorus*.

First heard as early as March 6th. Its parasitic habits

are well known to the peasants, who accuse it, with justice, of eating eggs, for a well-known naturalist at Lyons shot a female which had swallowed an egg of *Emberiza miliaria*, and the fact has been proved beyond doubt in England. Crespon tells his readers that Cuckoos are so thin on their arrival in spring that "maigre comme un coucou" has passed into a proverb; it cannot be exhaustion from migration which reduces them, for the muscles of birds are supposed to be developed for migration; but no one has fathomed the mysteries of this anomalous bird. Young Cuckoos present a kind of dimorphism, for though generally of a dark slate-colour, they are sometimes rufous, and no doubt it is the latter which eventually become hepatic forms; these hepatic birds are not at all uncommon on the Continent, and I once obtained a Cuckoo half normal and half hepatic, which was a very singular bird (*cf.* Norwich Naturalists' Trans. vi. p. 383).

SCOPS EARED OWL. *Scops giu.*

Local name "Machorta." The noise which goes on in the cork-woods of Provence on a hot spring night (April 12–May 12) from the combined melody of Scops Owls, Nightingales, and Frogs would hardly be credited, and is equal to anything on the Norfolk Broads. The chief offenders are the Scops Owls, which keep perpetually reiterating "scho-u, scho-u," beginning this music at 7 P.M. and going on with it all night long, which is anything but conducive to slumber for persons of weak nerves. Sometimes the sound is uttered on the wing, sometimes when perched, but always with the same cadence without any variation, at intervals of thirty seconds, given with the regularity of a clock: really the monotony of a Cuckoo is nothing to it! Two or three times the "love-song," if such it be, surprised us by beginning at 4 o'clock in the afternoon, and once at half-past one the irrepressible Owl was already tuning up. To what purpose can all this noise be? for it must serve something in the economy of nature.

As there are not many holes at Valescure, the timber being for the most part small, these Owls generally lay their

eggs, I am given to understand, in disused Magpies' nests, of which there are any amount. According to certain authors, they begin to lay in May, but everybody I asked said that we were too early for them, and that they laid in June. They are rather audacious birds. Two made their way into Mr. Sargeant's premises, another into the Villa Marguerite, and a fourth wished to come into my house by the window, a habit of temerity which has led to unjust accusations in some places where they have entered churches, it is whispered in search of holy oil! The flight of the Scops is as soft and noiseless as can be, and its chief food consists of insects, which it has to hand at all times for the taking. It will devour earwigs, mice, and caterpillars, but it is doubtful whether it eats birds. Spallanzani adds earthworms, of which *Athene noctua* is very fond. In May the Scops Owls roost in pairs, and a cork-tree within a few yards of the drawing-room at Villa Suveret was their chosen diurnal resort. Here little Scops was to be seen early in the morning, when his labours for the night were over, either quiescent like a stump or with erect horns and attenuated body, very much on the watch; but I was disappointed at never finding any remains of food under the perch, as I should like to have investigated a few pellets.

Crespon says that he shot fifteen Scops Owls in one day, probably for eating, which is a proof that they migrate in company, as *Asio accipitrinus*, *Nyctea scandiaca*, and *Asio otus* are known to do occasionally. The culinary merits of the Scops Owl must be great, for Pellicot says it is "sur quelques points, notamment à la presqu'île du Brusq, près Toulon, l'objet d'une chasse spéciale," and in Malta it is eaten. It is an Owl seldom to be bought of London animal-dealers, though there would not be much difficulty in getting a supply from the Var, one would think. My brother had one alive for some time.

LONG-EARED OWL. *Asio otus*.

Owing perhaps to the many Scops Owls the note of the "Moyen Duc" was not detected, but two were seen at Fréjus,

one on the shore and one on the sandhills. *Athene noctua* is well known but less common, as is *Strix aluco*. *Nyctala tengmalmi* has occurred at Nice (Ibis, 1881, p. 189), but not in the Var, where, however, *Asio accipitrinus* is stated by Risso to be found "in woods," which are not usually associated with this inhabitant of the open country. All the Owls are probably migratory except *Bubo ignavus*.

EAGLE OWL. *Bubo ignavus*.

This formidable bird does not appear to be very uncommon, and breeds in the Esterel chain, I understand. Three specimens, if not more, have been taken near Valescure, probably in winter, and if so, were driven no doubt by lack of food from their mountain fastnesses, as is commonly the case on the Lake of Geneva; in this sense only is the Eagle Owl a migratory bird, and it is unlikely that it ever goes far, or crosses the Mediterranean. There are many stories of its daring: one flew into Mr. Sargeant's partly-covered poultry-yard at Valescure, attracted by his fowls, and being unable to find the right way out again, was captured alive the next morning. I believe it is at the Marseilles Zoological Gardens, where Mr. Sargeant sent it. It had killed a chicken, and on a previous visit had carried off two Guinea-fowls, the remains of which were found on the hill opposite, no doubt left there by the same nocturnal robber. Mr. H. Saunders says that it also preys by day, but this act of spoliation was committed at night. A second took up its abode in a valley near the Grand Hotel, where it was seen eating a Wood-Pigeon, while another killed two Ducks and a hare. When picked up, the latter was minus an eye, but was otherwise uninjured, and the owner of the ducks spoke with glee of the good roast it made. This Owl is said to take kids and young roe-deer when it gets the chance, and peasants have been known to support themselves by daily robbing the nest of supplies brought for the young "Grand-Dues."

KESTREL. *Falco tinnunculus*.

A good many "Cresscelles" are scattered about, many being migrants arriving or departing, though some have

eyries. Duval-Jouve noticed that the travels of most of the birds of prey coincided with those of the smaller birds, and particularly that *F. tinnunculus* liked to accompany Larks on migration*.

Hobby. *Falco subbuteo*.

A small Hawk which dashed over our garden was, I guessed, *F. subbuteo*, which has been obtained at Cannes and is not rare. *F. cenchris* is included in Jaubert's list, along with *F. vespertinus* (also met with at Nice by Lord Lilford), and *F. peregrinus* was identified by Mr. St. Quintin at Tréyas and also near Cannes.

Buzzard. *Buteo vulgaris*.

One expects to see Buzzards in France, but my son and I only viewed a few. It used to be possible to see fifty in a day in Lorraine, and sometimes rich varieties; but that was thirty years ago, and they are now probably scarcer in all parts of France. This is one of the seven Raptorial species given as regular birds of passage by Duval-Jouve, the other six being *Pernis apivcrus*, *Accipiter nisus*, *Falco peregrinus*, *F. subbuteo*, *F. tinnunculus*, and *F. aesalon*. The last, however, according to Jaubert, sometimes nests here, as it is said to do in the Pyrenees.

GOLDEN EAGLE. *Aquila chrysaetos*.

A large Eagle which had come down from the mountains for food, and which a peasant at Valescure captured alive, may have been *A. chrysaetos*. So may an Eagle which was shot at Levens about last March, which I heard of after our return, for no doubt the "Aigle fauve" still breeds in the high ranges of the Basses Alpes. That partially albinistic

* Migratory Hawks have been seen at sea by many observers, the most remarkable instance being an old one, viz. that given by the Rev. Henry Teong, who in his 'Journal,' under date March 28th, 1676, says "a cross wind last night brought from the island of Cyprus an infinite number of hawks" among the British fleet, of which he was at the time chaplain, and at least fifty were taken on his ship. The author of 'Riviera Nature Notes' describes a great arrival of birds of prey at Nice, but this is quite surpassed by what Bellonius tells us of Kites on migration in the 16th century at the mouth of the Bosphorus.

race *A. barthelemyi*, figured in 'Richesses Ornithologiques,' had an historic eyrie little more than ten miles from the frontier, whence my father procured two young birds, one of which never got the white scapular spots, and the other not until it was seven years old. One of these is preserved in the Norwich Museum.

SHORT-TOED EAGLE. *Circæetus gallicus*.

The authors of 'Les Richesses Ornithologiques' say that this is the commonest Eagle in the South of France, arriving in April in small flocks of 4 or 5; that a few always breed at Salon, which is 28 miles from Marseilles; that it is often seen in spring in the great forests of the Var; and that M. Arquier took two eggs at Tanneron, near Grasse. Mr. St. Quintin saw one on March 16th, 1901, within easy gunshot, at the Grotte de l'Ours.

PALLID HARRIER. *Circus swainsoni*.

Several individuals have been obtained at Nice by the Baron de Palluel, and a fine male which I presented to the Norwich Museum was, I believe, got near that place.

MONTAGU'S HARRIER. *Circus cineraceus*.

Included by Jaubert, but not by Duval-Jouve. A male Harrier believed to be *C. cineraceus* was seen by Mr. St. Quintin to come in from the sea; but I should have said that in most of France *C. cyaneus* was the commoner bird, yet *C. cineraceus* was formerly extraordinarily abundant in the Department of Vienne ('Rev. Zoologique').

SPARROW-HAWK. *Accipiter nisus*.

A. nisus is pretty common, and *Astur palumbarius*, according to the authors here quoted, not very rare, but I have no personal notes to give from my limited observations.

EGYPTIAN VULTURE. *Neophron percnopterus*.

When Jaubert wrote (1853) *N. percnopterus* was to be met with all the year, and bred at Seranon, which is just over the N.E. corner of the Department of Var, not to mention other places.

LAMMERGEIER. *Gypaëtus barbatus*.

ROUX cites a capture in the Esterel Mountains, and there is in the Norwich Museum a well-preserved adult bird killed in the Magna Valley (Alpes Maritimes) many years ago, which has the whitest head and is probably the oldest of any of our series in the Museum.

CORMORANT. *Phalacrocorax* sp. inc.

April 30th, an adult vigorously flapping itself in the sea. Jaubert does not include *P. graculus*. Neither Wharton nor Whitehead give *P. carbo* as a bird of Corsica, but they say that *P. graculus* is fairly common there, so I will not be certain which it was that I saw off St. Raphael, as Corsica and Provence have a good deal in common.

PELICAN. *Pelecanus onocrotalus*.

The authors of 'Les Richesses Ornithologiques' are of opinion that the Pelican was formerly common; it is now a very rare straggler, but has been once met with and knocked on the head at Hyères.

STORK. *Ciconia alba*.

A "Cigogne" was seen passing over Lord Amherst's villa on April 20th, and I received one from near Nice. Ternier calls this species very rare in the Var, adding that it prefers an east wind both in spring and autumn, and that its migrations are very different from those of *Grus communis* (Ornis, 1899, p. 218).

HERON. *Ardea cinerea*.

The "Heron cendré" is by no means rare, but very few Heronries now exist in France. The African *A. atricollis*—a bird which might be expected to occur occasionally—has been taken at Draguignan (Revue Zool. 1854, vi. p. 6), and we learn from Pellicot that another southern species, the Buff-backed Heron, has been met with at Toulon. A Night-Heron was contained in the collection received by me from Nice.

LITTLE BITTERN. *Ardetta minuta*.

One found in the courtyard of a house in Nice. Neither *A. minuta* nor *Botaurus stellaris* breed in the Var; the

former is the *Taurus* of Pliny, which he describes as found in the neighbourhood of Arles.

FLAMINGO. *Phœnicopterus roseus*.

I asked many persons if they had ever seen "Le Flamant," but with a single exception was always answered in the negative: one man produced a fine adult *Ardea garzetta*, and at the same time accurately described *Himantopus candidus*, but did not know its name; yet in Duval-Jouve's time Flamingoes were to be met with near Fréjus and Laval. Mr. Clarke gives an interesting account of them in the Bouches du Rhône, and in 'Ornis,' 1899, p. 231, there is a photograph of 35 nests in a clump taken at that place, which shows well the sociable habits of *P. roseus*.

GARGANEY TEAL. *Querquedula circia*.

Apparently a commoner bird than *Nettion crecca*, there being many at the poulterer's, but only one Teal. Jaubert says, apparently referring to *Q. circia*: "Sarcelloun, Charinchara, se montre seulement en février et en mars;" but a coil of eight small ducks, circling over Fréjus Marsh on April 17th, were evidently *Q. circia*. However, I was given to understand that none ever nested there, though Pellicot, who seems to have stayed at Fréjus, says "il est à croire même qu'il en niche;" that, however, was some years ago. I flushed what I considered to be a bird of this species in Algeria as late as April 4th (paired), and I suspect that a few breed in the north of Africa.

SHOVELER. *Spatula clypeata*.

S. clypeata, *Dafila acuta*, and *Mareca penelope* were all in Grasse market, some of them possibly from the Étang Consécanière, where Mr. Clarke saw 1000 Shovelers at one time, and many other Ducks as well.

GADWALL. *Anas strepera*.

A. strepera and *Fuligula cristata* only come in winter, while on the contrary *Anas boscas*, which is locally known as the "Col-vert," breeds.

LONG-TAILED DUCK. *Harelda glacialis*.

Was obtained, as the authors of 'Les Richesses Ornithologiques' inform us, two or three times near Hyères by that successful collector, M. Besson.

RED-CRESTED POCHARD. *Fuligula rufina*.

F. rufina and *Mergus merganser*, both considered "very rare" by Jaubert, were met with by Lord Lilford in Cannes market, but had perhaps come from the Étang Consécanière, where Mr. Clarke found the former common, and on his spring visit discovered a nest. The *Fuligula intermedia* of Jaubert is the hybrid which in England has been designated "Paget's Pochard," after the celebrated Norfolk surgeon, and of which I have an example alive; this cross between *F. ferina*, which is common in Provence, and *F. nyroca*, is certainly the least rare hybrid among the European Anatidæ, in a wild state. Several examples are described by Suchetet.

SCOTER. *Ædemia nigra*.

Either *Æ. nigra* or *Æ. fusca*, probably the former, comes at times to St. Raphael's Bay, and in large quantities if the boatmen's tales are to be believed; while I have had *Æ. fusca* from Genoa. These Scoters are confounded by French sportsmen with *Fulica atra*, both, according to the authors of 'Les Richesses Ornithologiques,' being called "Macreuses"; and this led Yarrell into ascribing to *Æ. nigra* the Coot battues at the mouth of the Rhone, of which Pellicot gives a good account.

TURTLE-DOVE. *Turtur communis*.

T. communis is stated to come in March, but we did not see any until May, which agrees with the time of their arrival in England. I was told that there were English Wood-Pigeons (Ramiers) to be shot in winter, but did not hear that they were netted as in some other Departments. Jaubert also includes *Columba ænas*, which I have seen in other districts, but not in the Var. All these species are found in North Africa, which has so much in common with the South of France.

PIN-TAILED SAND-GROUSE. *Pterocles alchata*.

In January 1837 several individuals, supposed to have been driven from a stony waste called "The Crau" by snow, were killed at Fréjus, and in January 1871, the same month that my Great Bustard (to be mentioned presently) was shot, a considerable flight appeared in the plain of the Gard (Pellicot).

P. alchata has strayed as far north as Lyons (Olphe-Galliard) and La Basse, while one has been killed at Nice.

PHEASANT. *Phasianus colchicus*.

There are no Pheasants at Valescure, and the authors of 'Les Richesses Ornithologiques' give no hint that they exist in a wild state in the district; but a good many have been reared on the islands off Cannes, where they fly up in very orthodox style.

GREEK PARTRIDGE. *Caccabis saxatilis*.

Jaubert says that the "Bartavelle" is very rare, and whether it was this species or *C. petrosa* which was hanging in a game-shop at Cannes I forget, but I think the latter; if so, it may have been imported from Sardinia.

BARBARY PARTRIDGE. *Caccabis petrosa*.

We learn from M. Pellicot that *C. petrosa* has successfully multiplied in the island of Port Cros; and I once saw some specimens being hawked in the streets of Marseilles, but these may have come from Africa.

RED-LEGGED PARTRIDGE. *Caccabis rufa*.

Absolutely sedentary, and very much commoner where we were than *Perdix cinerea*, which Jaubert terms a bird of double passage*. In 'Les Richesses Ornithologiques' (p. 419) the same author says that two races of *C. rufa* exist in the Var, differing much in size. Two in a cage at Grasse were certainly large and bright, but not equal to the splendid examples to be seen in Spain. The brightness of

* Some years ago I spent two months in Lorraine, where I expected to find *Caccabis rufa* pretty common, but, on the contrary, it appeared to be exceedingly rare; on the other hand, I often saw a small covey of the Grey Partridge (*Perdix cinerea*), yet I do not think that either of them were migratory.

many Mediterranean species as compared with their more sombre hues in England is striking: is it the effect of the sun, which causes dead objects to fade, but seems to enhance the colours of the living?

QUAIL. *Coturnix communis*.

Every one who has flushed Quails must remember the headlong way in which they fly, partly due to the straightness and rapidity of their course, partly to their being dazzled by the light (for in some cases it happens immediately after a night journey), but they do not at any time like to rise in the heat of the day if they can avoid it. Sometimes, when flushed by one sportsman, they fly blindly direct towards another, without seeing where they go, though seldom travelling more than five hundred yards or rising more than six feet from the ground.

In spring the chief arrival, says M. Pellicot (whose admirable account of Quail-shooting occupies eight pages), takes place at 8 A.M.; but some have been found earlier, and there are times when they may be seen dropping in from the sea all day. When this is the case, it should not be inferred that the wind has been favourable, but quite the reverse, for migratory Quails which left Algeria the evening before ought to have made the coast of France by sunrise if they fly at 37 miles an hour, which is a very reasonable estimate. (See 'The Field,' July 9th, 1898.) First comers are called "Cailles vertes," in allusion to the green tints of spring.

The Quail has been accounted a nocturnal bird from the very earliest times, for even in the Book of Exodus the sacred writer says, "at even the Quails came up," in entire accordance with their habits at the present day. Any therefore that come in the daytime are birds which have been late in starting, or more likely have been delayed by the wind *en route*. They arrive at the end of April, but many dangers are in store for them, both by land and by sea, as exemplified by the following incident. Happening one day to be at Ciotat, a village on the coast, previously mentioned in my

account of the Wren, M. Pellicot saw some fishing-boats come ashore with ten small sharks ("Cagnoose," probably *Alopecias*); these voracious creatures were opened in his presence, and contained from eight to ten Quails each, which they had no doubt found floating. Quails are especially liable to misadventure, but the remains of various small birds, and even Owls*, are also to be picked up on the shore near Saint Raphael.

In autumn the return passage, according to Pellicot, is generally between the 15th of September and the 10th of October, and, considering the hosts of its enemies, it is not to be wondered at that the Quail is decreasing throughout the whole of France. In Norfolk it used to be abundant, but it seems absurd to seek for the cause of its diminution in agricultural changes in England, when the annual massacre which goes on in the south of Europe is enough to account for it. The bird's habits of concealment are very great, and in confinement it creeps into moss like a mouse. In Egypt I have seen, more than once, a small crop of lentils, which at first sight did not seem to hold a single specimen, prove full of them, forty or fifty brace, perhaps, getting up out of a patch 60 feet square.

BLACK GROUSE. *Tetrao tetrix*.

T. tetrix, *T. bonasia*, and *Lagopus mutus* occur on the mountains in the Alpes Maritimes, but it can only be occasionally that their wanderings extend to the Var. The authors of 'Les Richesses Ornithologiques' say that the

* Here it will not be inappropriate to quote a letter, written by Mr. J. S. Walker on board the yacht 'Aline':—"Ever since we left Tunis, all along the Malta Channel and upwards to Italy, the sea was covered everywhere with numbers of large brown butterflies, moths of all sizes, and dragon-flies just dead; for four or five days we sailed across many miles of water without finding any diminution in their numbers * * * * but what interested us more was the number of dead birds we passed, among which we recognised Hoopoes, Quails, Wheatears, and Kestrels." ('The Field,' April 12th, 1873.) Although so many drowned birds were seen, Mr. Walker adds that the number of live examples which passed the vessel was comparatively small. Quails are sometimes taken at the Camarat lighthouse, and they have been known to fly against boats drawn up on the shore.

inhabitants of some of the valleys in the Hautes Alpes have actually domesticated *T. tetrica* to a certain extent. *T. bonasia* was served at the hotel once or twice while we were there.

ANDALUSIAN HEMIPODE. *Turnix sylvatica*.

Included in Jaubert's 'List,' but no occurrences specified. Mr. Howard Saunders doubts its having been really met with in France in a wild state, and its inclusion in the British List is equally open to question. Count Salvadori records one seen in the market at Nice, but that may have come from Algeria, where, however, I did not find it common.

SPOTTED CRAKE. *Porzana maruetta*.

As the "Râle marouette" is rather rare in Algeria, it is surprising that it should be so common in the South of France. It must be very abundant somewhere near Grasse, as during March there were always a few in the market, and on March 27th no less than 31 at one stall. Pellicot says that at Fréjus these birds are called "Marsenquo," from their appearing in that month, and that hundreds have been killed by a single gun in the course of a migration, there being generally two or three great days of passage in spring. March is a month one associates with *P. maruetta* in England, when, no doubt, some of the migrants which we receive are the same which have escaped the French "chasseurs," who appear particularly partial to this palatable Rail.

MOOR-HEN. *Gallinula chloropus*.

The "Jardiniero" arrives in autumn, departs in spring (Jaubert). *Porzana parva* and *P. bailloni* are included in the same list, and the former is also especially mentioned by Risso; but though I carefully looked out for them in the market, I could not see one. Degland and Gerbe state that they examined a Purple Porphyrio which was killed at Trans, a town in the Var.

CORN-CRAKE. *Crex pratensis*.

Gould (B. of Gt. Br.) cites an instance of several specimens being captured on a ship in the Mediterranean in October, which had probably left the South of France a few

hours before ; the bird is known there by the honourable title of " King of the Quails," as its arrival coincides with theirs.

WATER-RAIL. *Rallus aquaticus.*

Three " Râles d'eau " in Grasse market on March 20th, the month of their arrival as given by Duval-Jouve, who was no doubt familiar enough with this market, where there was also a *Fulica atra* on the 23rd, which had perhaps missed its way, for Duval-Jouve says it is found at that season in ditches.

[BRAZILIAN JACANA. *Parra jacana.*

M. Jaubert informs us in his ' List ' (*l. c.* p. 426) that there was in 1853, in the collection of M. Jouffret, a South-American Jacana which had been taken alive in the marshes at Fréjus, and had been recently mounted when he examined it. No further facts are given in ' Les Richesses Ornithologiques ' (*vide* p. 486), but there is nothing impossible in *P. jacana*, which is known to be a migratory species, crossing the Atlantic by the help of a ship. All the group are wanderers, and the fact is not much more remarkable than the capture of Allen's Porphyrio 700 miles from the African coast (*P. Z. S.* 1900, p. 660), or of three Belted Kingfishers in Ireland and Holland. A bird on the wing is, under favourable circumstances, nearly as much at rest as when it is standing, the real difficulty is to know how such wanderers as these subsist without food for the time required for the transit.]

CRANE. *Grus communis.*

The distribution of the Crane is curious. Twice a year, it is said, phalanges of " Grues " pass over the Var, so high that they are scarcely visible ; and the question is, where are they going ? Their destination is probably rather N.E. than N. in spring. M. Ternier thinks that when the Crane reaches the Var on its return journey to the south in autumn it turns to the west ; and if so, no doubt it continues in a westerly direction along the line of the Pyrenees (*Ornis*, x. p. 210). It seems clear that the extraordinary numbers seen in Spain by Col. Irby do not all come to France.

GREAT BUSTARD. *Otis tarda*.

In 1871 I received an "Outarde barbue" (Provençal "Ooutardo") from Nice, which had been shot on the 17th of January, after the same severe weather which caused a remarkable migration of the species into England and Belgium (*cf.* 'Zoologist,' p. 2770). Pellicot alludes especially to this Siberian winter, when numerous flights of *Alauda arvensis*, *A. arborea*, *A. calandra*, &c. appeared on the shore. I was in France at the time and remember it well: the day before my Bustard was shot I had bought for two sous a dead *Buteo vulgaris* frozen as stiff as a board! while the starved Kestrels sat in the trees as if they were asleep, and gangs of famished Rooks searched the river's edge. In 1890 or 1891 a fine old male *O. tarda* was shot at Bocca on the coast, also, I believe, during snow.

LITTLE BUSTARD. *Otis tetrix*.

Jaubert calls the "Canepetière" very rare, but I remember having a good view of one in Department Gard, not far from Nîmes, the home of the naturalist Crespon. In Algeria *O. tetrix* always went by the name of "Poule de Carthage," a name which Pellicot assigns to *Ædicnemus crepitans*. The latter is common in some parts of France, as markets testify, but is rare in the Var, which, from its hilly nature, is not much adapted to such birds. An excellent book on the habits and distribution of Bustards and Plovers in France has been lately published by M. Lafourcade, including both of these species, and a great deal of information about them.

COLLARED PRATINCOLE. *Glareola pratincola*.

An interesting fact mentioned by Jaubert in his 'List' is that *G. pratincola* has been known to nest on the shore near Cannes, and one killed on the island of St. Honorat is in the Cannes Museum. Mr. Clarke saw a few of these birds at the mouth of the Grand Rhône. I think that they have a great resemblance to the Terns in their flight and cry, however far removed they may be from them in kinship.

COURSER. *Cursorius gallicus*.

Included in Jaubert's 'List,' but no occurrences specified ; it can only be a very rare straggler.

OYSTER-CATCHER. *Hæmatopus ostralegus*.

In the South of France *H. ostralegus*, which in England is often called the "Sea-pie," is for a similar reason known as "Agasso de Mer," namely, from its resemblance to the black-and-white Magpie.

RUFF AND OTHER WADERS. *Machetes pugnax*, *Charadrius pluvialis*, *Vanellus vulgaris*.

Several of each of these Waders were seen in one or other of the markets, as were *Gallinago caelestis*, one *G. gallinula*, and one Woodcock (on a former visit) ; one *Totanus calidris* was met with at the mouth of the Argente. *V. vulgaris* sometimes flies round the Camarat lighthouse, but seldom or never strikes the lantern ; other sorts of Plovers are occasionally got by the principal keeper, with a certain number of Quails and land-birds. Three *M. pugnax* were already in process of change as early as March 9th.

LITTLE RINGED PLOVER. *Ægialitis curonica*.

Several examples of *Æ. curonica* and *Æ. cantiana* were seen running about at the mouth of the Argente, probably merely on passage ; but the authors of 'Les Richesses Ornithologiques' say that *Æ. curonica* breeds regularly on the Verdon River.

MARSH-SANDPIPER. *Totanus stagnatilis*.

Of this "Chevalier" the authors of 'Les Richesses Ornithologiques' write :—"Il a été rencontré simultanément et à diverses reprises, dans les marais d'Hyères et de Fréjus, pendant les premiers jours de juin. M. Besson, d'Hyères, croyait à sa reproduction dans les environs de cette ville." That it should breed there seems unlikely from what authors tell us of its distribution, but Besson was evidently a good observer.

GREEN SANDPIPER. *Totanus ochropus*.

T. ochropus is pretty common in March and April, and is

probably found throughout the year, but that does not prove that it breeds*. A pair of *T. hypoleucus* were skirting the shore on April 30th; it has bred once on the banks of the river Verdon ('Les Richesses Ornithologiques,' p. 461). In addition to these, Jaubert includes *T. glareola*, *T. fuscus*, *T. glottis*, *Squatarola helvetica*, and *Eudromias morinellus*.

GODWITS. *Limosa lapponica* and *L. belgica*.

Lord Lilford does not say which the Godwit was that he met with at Toulon, but, according to Jaubert, *L. lapponica* has only occurred on passage, and that rarely, while the species which Mr. Eagle Clarke met with was the Black-tailed Godwit (*L. belgica*).

SANDWICH TERN. *Sterna cantiaca*. "Hirondelle de mer caugek."

About a dozen birds came round our boat while anchored for fishing in St. Raphael Bay on April 11th, and often dropped into the sea with a splash in pursuit of small grey mullet and young sardines; again on May 9th a single specimen was placidly floating on a box in the sea. Jaubert regards *S. cantiaca* as of only accidental occurrence, but it seems from the experience of English observers to be a common bird in the Western Mediterranean. Far rarer are *S. caspia*, which has once occurred at Nice (Ibis, 1887, p. 283), and *S. leucoptera*, which has been met with as far inland as Draguignan (Jaubert), while other Terns included in his 'List' are *S. hybrida*, *S. nigra*, *S. minuta*, and *S. hirundo*.

LESSER BLACK-BACKED GULL. *Larus fuscus*. "Goéland à pieds jaunes."

There were several of these "Gros Gabians" in St. Raphael Bay, and a few Herring-Gulls—*L. cachinnans* Pall. (*L. leucophæus*) I presume—with a darker mantle than our *L. argentatus*, and no doubt yellow legs, but I handled none of them.

MEDITERRANEAN BLACK-HEADED GULL. *Larus melanocephalus*.

Lord Lilford, who, though laid up with acute rheumatism

* Nor does the frequent presence of this species in Norfolk and in Algeria in summer prove it. (See Ibis, 1871, p. 299.)

on board his yacht, missed no opportunities, met with *L. melanocephalus* and *L. canus* at Toulon, and was further told of many Gulls breeding on the islet of La Gabinera, to which fact it perhaps owes its name, "Gabian" being a Gull in the native dialect.

BLACK-HEADED GULL. *Larus ridibundus*.

The "Mouette riense" must be far commoner than *L. melanocephalus*, yet it is curious, as shown by M. Ternier's maps, in how few of the inland Departments of France *L. ridibundus* is met with commonly, though a good many examples are to be seen on the sea-coast.

CAPE PETREL. *Daption capensis*.

We learn from Degland and Gerbe that a "Pétrel Damier" (*D. capensis*) was killed at Hyères in October 1844 by M. Besson, the bird-stuffer, the same who the year after, as Prof. Newton points out, shot the first *Ardea melanocephala*. Besides this, two were obtained at Berey on the Seine, a suburb of Paris; two also in the Department of Sarthe prior to 1878 (M. Amb. Gentil); and one, according to Van Kempen, at Dunkerque in 1880. *D. capensis* has also been recorded twice in England, once in Wales, and once in Ireland; but six are known to have been on one occasion released in the English Channel (Ibis, 1867, p. 188), and the practice may have been followed by sailors elsewhere.

MEDITERRANEAN SHEARWATER. *Puffinus kuhli*.

One in Cannes Museum, where the curator showed me a specimen of *Procellaria pelagica* which had been picked up on the shore. The latter I have observed off the Balearic Islands—near which I have also seen *Puffinus kuhli*. It is a common Mediterranean bird, both in the east and in the west.

LEVANTINE SHEARWATER. *Puffinus yelkouanus*.

In Jaubert's 'List' the name of *P. yelkouanus* must be substituted for *P. obscurus*, and *P. kuhli* for *P. cinereus*, which also I suppose Pellicot's *Procellaria puffinus* to be. *P. yelkouanus* breeds in Corsica (Ibis, 1885, p. 48); but I

have not met with it so far north, only having seen it in the south of Italy.

RED-THROATED DIVER. *Colymbus septentrionalis*. "Plongeon cat-marin."

A feather on the shore confirmed me in the opinion that two large Divers, seen on a former visit, were *C. septentrionalis*; but as Jaubert also includes *C. arcticus*, I cannot be quite sure. According to 'Les Richesses Ornithologiques' the latter is much the rarer of the two.

EARED GREBE. *Podiceps nigricollis*.

Five Grebes are included by Jaubert—*P. cristatus*, *P. griseigena*, *P. auritus*, *P. fluviatilis*, and *P. nigricollis*; but it appears that the last two alone can be called common, and these only in winter. *P. nigricollis* I have seen at Gibraltar in January, and Canon Tristram met with it in Algeria.

RAZORBILL. *Alca torda*.

Reported by St. Raphael boatmen to be in considerable numbers at the end of April, but we saw only one fine adult and a young bird. Jaubert also includes *Fratercula arctica* as occasionally seen by fishermen in July and August, and Prof. Giglioli thinks it possible that both these species may breed in the Mediterranean. *Uria troile* is much rarer, and has not yet been added to the Var list.

Before concluding, I should like to devote a few words to the migration of land-birds across the Mediterranean, which, as has been said, takes place almost entirely at night. If it were by day, we should be astounded at the numbers, but, as a matter of fact, what an ornithologist watching on the coast of France sees is only a very small portion—and that a belated portion—of the feathered pilgrims. Yet it may be that a certain number of Kites, Buzzards, Kestrels, Swallows, Wagtails, Hoopoes, Storks, and Cranes cross the great sea by preference in the daytime. All birds are not equally nocturnal, and there are indications that the above-named are to some extent day-migrants; but the majority of

birds, especially small birds, would be exposed to considerably more danger by day than by night, from Hawks and Gulls, and even from man.

So far as the Mediterranean is concerned, the fact that most birds migrate by night is not a sufficient proof, as some have alleged, that they do not travel by sight, a sense which is known to be very highly developed in them (*Gyps fulvus* and *Cypselus apus* for example), for unless the night were foggy or exceptionally dark, coast-lines and mountains would be visible. They probably have greater powers of seeing in the dark than we have; and supposing a Corn-crake or a Turtle-Dove nearly half a mile up in the air, which is no unreasonable altitude, to approach the coast-line of Provence, no doubt some of the island of Corsica would be visible to it, and the contour of a portion of the Italian coast; nor would it on starting have flown many miles from Algeria before either Sardinia or the Balearic Isles came into view.

If we look at the map, it is evident that there is hardly any part of the Mediterranean Sea where a migratory bird, crossing on a fine night, need be out of sight of land for more than three or four hours, and during that time its sense of direction would keep it pretty much in the course it had been taking when it started.

Now as to the time required for the transit. Under favourable circumstances it could not take a Turtle-Dove more than 11 hours to fly from Algiers to the Var—that is, at the rate of 37 miles an hour, which is what Mr. Tegetmeier tells us that a Homing-Pigeon has been actually known to attain; but supposing a strong wind to blow directly behind, it would perhaps do the voyage in half that time; moreover, a Homing-Pigeon does not fly straight, but generally describes large curves.

It is almost certain that the greater part of the spring migrants—practically all which are not delayed—can cross the Mediterranean in its broadest part in one night, and do so. At the same time, they are averse to running risks, and

although a hundred observers in the English Channel have proved that migratory birds are not dependent on a short sea passage, it is natural that where they have the choice they should to some extent prefer it, knowing themselves to be more or less at the mercy of the winds. Accordingly the observations of Colonel Irby and others, recorded in 'The Ornithology of Gibraltar,' seem to prove that however many African migrants may arrive in spring on the south coast of France, a far greater number cross from Morocco into Spain, where the journey is very much shorter for them.

As regards wind, that is a subject on which there are many opinions, and those rather contradictory. It can hardly be that any birds prefer a head-wind for their migration, though if long delayed at the point of departure they may be found to accept it; and then they are naturally more in evidence on landing, because that same head-wind has been keeping them back, and the observer sees them, which he would otherwise not have done. It is evidently a head-wind which makes Quails, Woodcocks, &c. occasionally appear so fatigued on landing, and not the length of the sea-passage; and this must also be the reason when, as sometimes happens, they are seen to settle on the water, no doubt in consequence of exhaustion.

In the same way it was obviously the N.E. wind, being a *head*-wind, which in April 1895 caused an unwonted influx of birds to arrive on the coast at Bordighera (Zoologist, 1895, p. 309), and the westward movements of Pigeons and Starlings described above (see p. 364) are only explicable on the theory of a head-wind coming from the west. Of one thing we may be fairly certain, that wind is the key to the right understanding of ornithological migration, and that when we do understand it, what seem to be erratic movements will admit of explanation, though without that knowledge they are not likely to be ever made clear.